

US 113 RUNS IN A NORTH-SOUTH DIRECTION.

EQUIPMENT LISTS

A. EQUIPMENT TO BE FURNISHED BY THE SHA

ITEM NO.	QUANTITY	DESCRIPTION
	142.5 S.F.	SHEET ALUMINUM SIGNS
1 EACH		ASSOCIATED SHIELD ASSEMBLY SIGN, "EAST, MARYLAND 346, (RIGHT ARROW)", 30" x 51", POLE MOUNTED HARDWARE
1 EACH		ASSOCIATED SHIELD ASSEMBLY SIGN, "WEST, MARYLAND 346, (LEFT ARROW)", 48" x 75", POLE MOUNTED HARDWARE
1 EACH		ASSOCIATED SHIELD ASSEMBLY SIGN, "WEST, MARYLAND 346, (RIGHT ARROW)", 30" x 51", POLE MOUNTED HARDWARE
1 EACH		ASSOCIATED SHIELD ASSEMBLY SIGN, "EAST, MARYLAND 346, (LEFT ARROW)", 48" x 75", POLE MOUNTED HARDWARE
1 EACH		ASSOCIATED SHIELD ASSEMBLY SIGN, "NORTH, US 113, (RIGHT ARROW)", 30" x 51", POLE MOUNTED HARDWARE
1 EACH		ASSOCIATED SHIELD ASSEMBLY SIGN, "SOUTH, US 113, (LEFT ARROW)", 48" x 75", POLE MOUNTED HARDWARE
1 EACH		ASSOCIATED SHIELD ASSEMBLY SIGN, "SOUTH, US 113, (RIGHT ARROW)", 30" x 51", POLE MOUNTED HARDWARE
1 EACH		ASSOCIATED SHIELD ASSEMBLY SIGN, "NORTH, US 113, (LEFT ARROW)", 48" x 75", POLE MOUNTED HARDWARE

B. EQUIPMENT TO BE FURNISHED AND/ OR INSTALLED BY THE CONTRACTOR

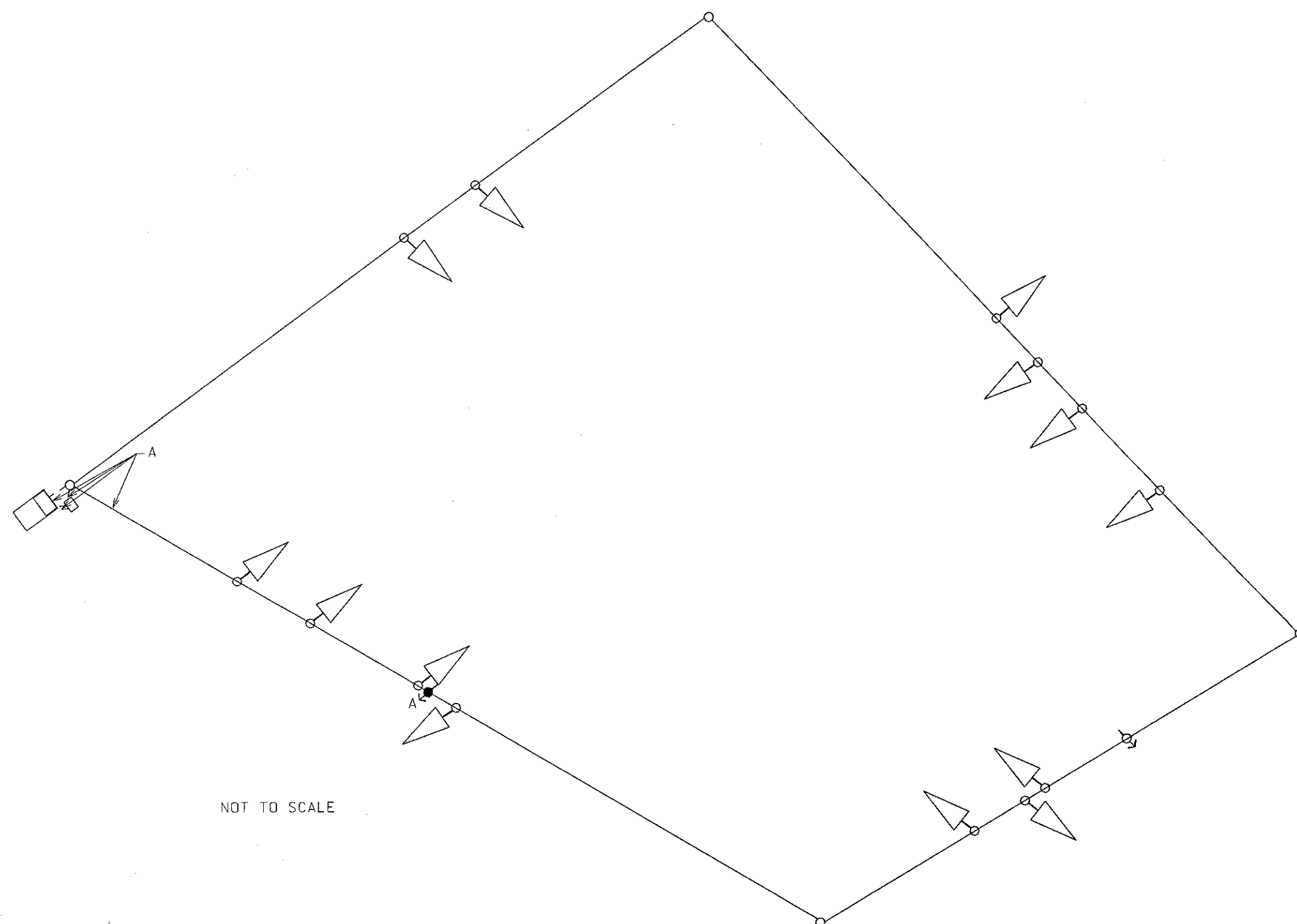
ITEM NO.	QUANTITY	DESCRIPTION
1001	1 EACH	MAINTENANCE OF TRAFFIC
8018	140 L.F.	F & I 4-CONDUCTOR OPTICOM DETECTOR CABLE
8043	142.5 S.F.	INSTALL OVERHEAD MOUNTED SIGN
8047	1 EACH	F & I OPTICOM NO. 721 DETECTOR EYE

C. EQUIPMENT TO BE REMOVED AND RETURNED TO THE SHA

ITEM NO.	QUANTITY	DESCRIPTION
		ALL REMOVED SIGNAL MATERIALS ARE TO BECOME THE PROPERTY OF THE CONTRACTOR

WIRING DIAGRAM

A = 4-CONDUCTOR OPTICOM DETECTOR CABLE



NOT TO SCALE

PHASE CHART

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	
PHASE 1 & 5	◀R- ◀Y- ◀B-	◀R- ◀Y- ◀B-	R Y B	R Y B	◀R- ◀Y- ◀B-	◀R- ◀Y- ◀B-	R Y B	R Y B	R Y B	R Y B	R Y B	R Y B	R Y B	R Y B	▶R ▶Y ▶B
1 & 5 CHANGE	THE CONTROLLER MAY SKIP TO PHASES 1 & 6, OR 2 & 5, OR 2 & 6														▶R ▶Y ▶B
PHASE 1 & 6	◀R- ◀Y- ◀B-	◀R- ◀Y- ◀B-	R Y B	R Y B	◀R- ◀Y- ◀B-	◀R- ◀Y- ◀B-	G Y B	G Y B	R Y B	R Y B	R Y B	R Y B	R Y B	R Y B	▶R ▶Y ▶B
1 CHANGE	◀R- ◀Y- ◀B-	◀R- ◀Y- ◀B-	R Y B	R Y B	◀R- ◀Y- ◀B-	◀R- ◀Y- ◀B-	G Y B	G Y B	R Y B	R Y B	R Y B	R Y B	R Y B	R Y B	▶R ▶Y ▶B
PHASE 2 & 5	◀R- ◀Y- ◀B-	◀R- ◀Y- ◀B-	G Y B	G Y B	◀R- ◀Y- ◀B-	◀R- ◀Y- ◀B-	R Y B	R Y B	R Y B	R Y B	R Y B	R Y B	R Y B	R Y B	▶R ▶Y ▶B
5 CHANGE	◀R- ◀Y- ◀B-	◀R- ◀Y- ◀B-	G Y B	G Y B	◀R- ◀Y- ◀B-	◀R- ◀Y- ◀B-	R Y B	R Y B	R Y B	R Y B	R Y B	R Y B	R Y B	R Y B	▶R ▶Y ▶B
PHASE 2 & 6	◀R- ◀Y- ◀B-	◀R- ◀Y- ◀B-	G Y B	G Y B	◀R- ◀Y- ◀B-	◀R- ◀Y- ◀B-	G Y B	G Y B	R Y B	R Y B	R Y B	R Y B	R Y B	R Y B	▶R ▶Y ▶B
2 & 6 CHANGE	◀R- ◀Y- ◀B-	◀R- ◀Y- ◀B-	Y Y Y	Y Y Y	◀R- ◀Y- ◀B-	◀R- ◀Y- ◀B-	Y Y Y	Y Y Y	R Y B	R Y B	R Y B	R Y B	R Y B	R Y B	▶R ▶Y ▶B
PHASE 3 & 7	◀R- ◀Y- ◀B-	◀R- ◀Y- ◀B-	R Y B	R Y B	◀R- ◀Y- ◀B-	◀R- ◀Y- ◀B-	R Y B	R Y B	◀R- ◀Y- ◀B-	◀R- ◀Y- ◀B-	R Y B	◀R- ◀Y- ◀B-	◀R- ◀Y- ◀B-	R Y B	▶R ▶Y ▶B
3 & 7 CHANGE	THE CONTROLLER MAY SKIP TO PHASES 3 & 8, OR 4 & 7, OR 4 & 8														▶R ▶Y ▶B
PHASE 3 & 8	◀R- ◀Y- ◀B-	◀R- ◀Y- ◀B-	R Y B	R Y B	◀R- ◀Y- ◀B-	◀R- ◀Y- ◀B-	R Y B	R Y B	R Y B	R Y B	R Y B	◀R- ◀Y- ◀B-	◀R- ◀Y- ◀B-	G Y B	▶R ▶Y ▶B
3 CHANGE	◀R- ◀Y- ◀B-	◀R- ◀Y- ◀B-	R Y B	R Y B	◀R- ◀Y- ◀B-	◀R- ◀Y- ◀B-	R Y B	R Y B	R Y B	R Y B	R Y B	◀R- ◀Y- ◀B-	◀R- ◀Y- ◀B-	G Y B	▶R ▶Y ▶B
PHASE 4 & 7	◀R- ◀Y- ◀B-	◀R- ◀Y- ◀B-	R Y B	R Y B	◀R- ◀Y- ◀B-	◀R- ◀Y- ◀B-	R Y B	R Y B	◀R- ◀Y- ◀B-	◀R- ◀Y- ◀B-	G Y B	G Y B	R Y B	R Y B	▶R ▶Y ▶B
7 CHANGE	◀R- ◀Y- ◀B-	◀R- ◀Y- ◀B-	R Y B	R Y B	◀R- ◀Y- ◀B-	◀R- ◀Y- ◀B-	R Y B	R Y B	◀R- ◀Y- ◀B-	◀R- ◀Y- ◀B-	G Y B	G Y B	R Y B	R Y B	▶R ▶Y ▶B
PHASE 4 & 8	◀R- ◀Y- ◀B-	◀R- ◀Y- ◀B-	R Y B	R Y B	◀R- ◀Y- ◀B-	◀R- ◀Y- ◀B-	R Y B	R Y B	G Y B	G Y B	G Y B	G Y B	R Y B	R Y B	▶R ▶Y ▶B
4 & 8 CHANGE	◀R- ◀Y- ◀B-	◀R- ◀Y- ◀B-	R Y B	R Y B	◀R- ◀Y- ◀B-	◀R- ◀Y- ◀B-	R Y B	R Y B	Y Y Y	Y Y Y	Y Y Y	Y Y Y	Y Y Y	Y Y Y	▶R ▶Y ▶B
FLASHING	FL/RA	FL/RA	FL/Y	FL/Y	FL/RA	FL/RA	FL/Y	FL/Y	FL/R	FL/R	FL/R	FL/R	FL/R	FL/R	▶R ▶Y ▶B
OPERATION	FL/RA	FL/RA	FL/Y	FL/Y	FL/RA	FL/RA	FL/Y	FL/Y	FL/R	FL/R	FL/R	FL/R	FL/R	FL/R	▶R ▶Y ▶B

FIRE HOUSE PRE-EMPTION - PHASE 2 & 5

FIREHOUSE PRE-EMPTION PHASE 2 & 5	◀R- ◀Y- ◀B-	◀R- ◀Y- ◀B-	G Y B	G Y B	◀R- ◀Y- ◀B-	◀R- ◀Y- ◀B-	R Y B	R Y B	R Y B	R Y B	R Y B	R Y B	R Y B	R Y B	▶R ▶Y ▶B
PRE-EMPTION CLEARANCE	◀R- ◀Y- ◀B-	◀R- ◀Y- ◀B-	Y Y Y	Y Y Y	◀R- ◀Y- ◀B-	◀R- ◀Y- ◀B-	R Y B	R Y B	R Y B	R Y B	R Y B	R Y B	R Y B	R Y B	▶R ▶Y ▶B
PHASE 2 & 5 NORMAL OPERATION	◀R- ◀Y- ◀B-	◀R- ◀Y- ◀B-	G Y B	G Y B	◀R- ◀Y- ◀B-	◀R- ◀Y- ◀B-	G Y B	G Y B	R Y B	R Y B	R Y B	R Y B	R Y B	R Y B	▶R ▶Y ▶B

FIRE HOUSE PRE-EMPTION - PHASE 4 & 7

FIREHOUSE PRE-EMPTION PHASE 4 & 7	◀R- ◀Y- ◀B-	◀R- ◀Y- ◀B-	R Y B	R Y B	◀R- ◀Y- ◀B-	◀R- ◀Y- ◀B-	R Y B	R Y B	◀R- ◀Y- ◀B-	◀R- ◀Y- ◀B-	G Y B	G Y B	G Y B	R Y B	▶R ▶Y ▶B
PRE-EMPTION CLEARANCE	◀R- ◀Y- ◀B-	◀R- ◀Y- ◀B-	R Y B	R Y B	◀R- ◀Y- ◀B-	◀R- ◀Y- ◀B-	R Y B	R Y B	◀R- ◀Y- ◀B-	◀R- ◀Y- ◀B-	Y Y Y	Y Y Y	Y Y Y	Y Y Y	▶R ▶Y ▶B
PHASE 4 & 7 NORMAL OPERATION	◀R- ◀Y- ◀B-	◀R- ◀Y- ◀B-	G Y B	G Y B	◀R- ◀Y- ◀B-	◀R- ◀Y- ◀B-	G Y B	G Y B	R Y B	R Y B	R Y B	R Y B	R Y B	R Y B	▶R ▶Y ▶B

THE PROJECT CONTACTS ARE AS FOLLOWS:

MR. GENE COPIELL ASSISTANT DISTRICT ENGINEER - TRAFFIC PHONE: (410) 677-4040	MR. RICHARD DAFF CHIEF, TRAFFIC OPERATIONS DIVISION PHONE: (410) 787-7630
MR. JAMES R. WRIGHT ASSISTANT DISTRICT ENGINEER - MAINTENANCE PHONE: (410) 677-4010	MR. ROBERT SNYDER ASSISTANT DIVISION CHIEF, TRAFFIC OPERATIONS DIVISION PHONE: (410) 787-7631
MR. BRUCE W. POOLE ASSISTANT DISTRICT ENGINEER - UTILITIES PHONE: (410) 677-4082	MR. EDWARD RODENHIZER CHIEF, SIGNAL OPERATIONS SECTION PHONE: (410) 787-7652

PROJECT CONTACTS

MARYLAND DOT - STATE HIGHWAY ADMINISTRATION			
Office of Traffic & Safety			
TRAFFIC ENGINEERING DESIGN DIVISION			
US 113 and MD 346 BERLIN, MARYLAND			
DRAWN BY: <u>William Malolen</u>	F.A.P. NO. <u>W0607A81P51</u>	T.S. NO. <u>TS-1738 D</u>	SHEET NO. <u>2 OF 2</u>
CHECKED BY: <u>AS NOTED</u>	COUNTY: <u>WORCESTER</u>	T.I.M.S. NO. <u>F605</u>	
DATE: <u>05/2003</u>	LOG MILE: <u>23011328.88</u>		